Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claim 1 (currently amended) A method for interpolative coding input signals, said signals decomposed into or composed of a slowly evolving waveform and a rapidly evolving waveform having a magnitude, the method incorporating at least one of the following steps:

(a) analysis-by-synthesis vector quantization of the rapidly evolving waveform parameter;

(b) parametrizing the magnitude of the rapidly evolving waveform;

(c) incorporating temporal weighting in the AbS VQ of the REW; or

(d) incorporating spectral weighting in the AbS VQ of the REW;

~~(e)~~ the method either (1) applying a filter to a vector quantizer codebook in the analysis-by-synthesis vector-quantization of the rapidly evolving waveform whereby to add self correlation to the codebook vectors~~; and~~

~~(f)~~ or (2) using a coder in which a plurality of bits therein are allocated to the rapidly evolving waveform magnitude.

Claim 2 (original) The method of claim 1 further comprising analysis-by-synthesis vector quantization of the slowly evolving waveform.

Claim 3 (original) The method of claim 1 wherein said signal is speech.

Claim 4 (original) The method of claim 1 wherein said method incorporates each of steps (a) through (c).

Claim 5 (currently amended) A method for interpolative coding input signals, said signals decomposed into or composed of a slowly evolving waveform and a rapidly evolving waveform having a magnitude, comprising:

(a) analysis-by-synthesis vector quantization of the rapidly evolving waveform parameter;

(b) analysis-by-synthesis quantization of the slowly evolving waveform;

(c) parametrizing the magnitude of the rapidly evolving waveform;

(d) incorporating temporal weighting in the analysis-by-synthesis vector quantization of the rapidly evolving waveform; and

(e) incorporating spectral weighting in the analysis-by-synthesis vector quantization of the rapidly evolving waveform

the method either (1) applying a filter to a vector quantizer codebook in the analysis-by-synthesis vector-quantization of the rapidly evolving waveform whereby to add self correlation to the codebook vectors or (2) using a coder in which a plurality of bits therein are allocated to the rapidly evolving waveform magnitude.

Claim 6 (original) The method of claim 1 in which in the step of analysis-by-synthesis of a first vector-quantization of the slowly evolving waveform is predicted based on the vector quantization of the rapidly evolving waveform and a second vector quantization of the slowly evolving waveform.

Claim 7 (currently amended) A method for interpolative coding input signals, said signals decomposed into or composed of a rapidly evolving waveform, comprising incorporating analysis-by-synthesis vector quantization of the rapidly evolving waveform parameter, the method either (1) applying a filter to a vector quantizer codebook in the analysis-by-synthesis vector-quantization of the rapidly evolving waveform whereby

to add self correlation to the codebook vectors or (2) using a coder in which a plurality of bits therein are allocated to the rapidly evolving waveform magnitude.

Claims 8 – 28 (canceled)

Claim 29 (currently amended) A speech coding system using waveform interpolation comprising at least one of the following steps:

(a) analysis-by-synthesis vector quantization of a rapidly evolving waveform parameter;

(b) parametrizing a magnitude of a rapidly evolving waveform;

(c) incorporating temporal weighting in the AbS VQ of the REW; or

(d) incorporating spectral weighting in the AbS VQ of the REW;

~~(e)~~ the method either (1) applying a filter to a vector quantizer codebook in the analysis-by-synthesis vector-quantization of the rapidly evolving waveform whereby to add self correlation to the codebook vectors~~; and~~

~~(f)~~ or (2) using a coder in which a plurality of bits therein are allocated to the rapidly evolving waveform magnitude.

Claims 30 – 35 (canceled)